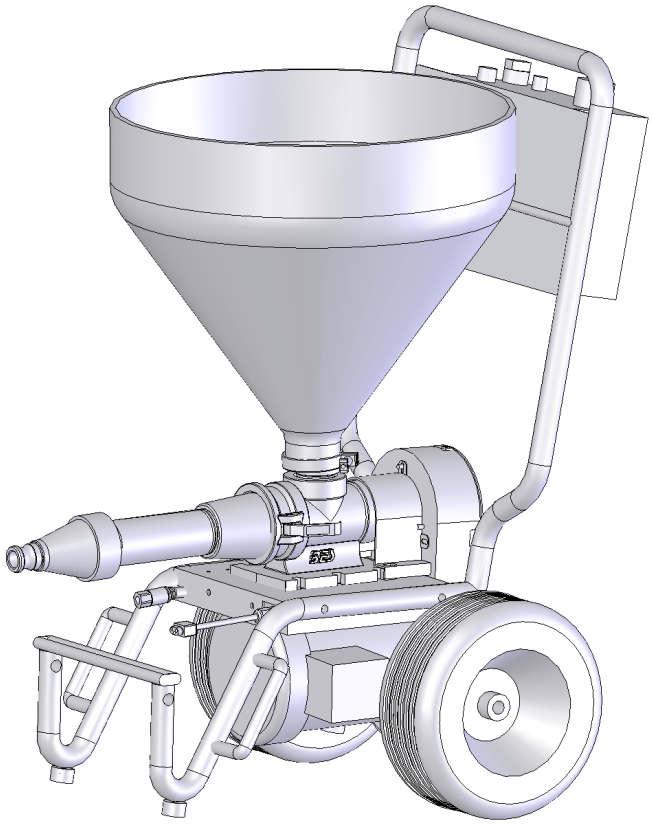
Service Manual



ROTORTEX 230V/60HZ -240V50HZ

Edition 08/2008

19-230EU
19-245EU

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SAFETY PRECAUTIONS

This manual contains information which must be read and understood before using the equipment. When following instructions in the manual, pay close attention to warnings following the symbol below.

SAFETY STANDARDS

The United States Government Safety Standards have been adopted under the Occupational Safety and Health Act. These standards, particularly the General Standards, Part 1910 and Construction Standards, Part 1926, should be consulted.

Warning and Precautions.

Never reach into sprayer jet with your finger or hands!

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never aim the spray at yourself or other persons!

The material sprayer cause chemical burn or irritations!

Protect your skin and eyes!

The Rotortex sprayer designed to be operated is a dry environment, do not expose to rain, mist or streams of water.

Warning!!! Never unplug main power cord during operation, it will damage the power drive!!!

Do not open power drive in any condition this will void your warrantee, in case of a problems call Benron Equipment, Customer service at 888-327-9839 for direction assistant.

Do not use this product if ground terminal is damage or missing.

When using extension cord makes sure it accepts a grounding wire.

Do not attempt to operate this unit at other then 220v 60hz in the USA or 240v 50hz in Europe.

Do not attempt to change or short or cut the control cord from the gun switch to control box.

Do not operate this unit in an enclosed area that contains flammable materials.

Do not operate this unit within 30ft/10m of any flammable or explosive materials.

Do not operate the unit without the belt cover, keep your hand away it may result in serious injury.

The Rotortex sprayer capable of high material pressure do not change hose fitting, use original hose fittings and quick connectors.

When operate the sprayer make sure material hose in not kink, it make case for hose internal tear or damage that will result in hose brake down and serious injury.

Check all connection for leaks.

The pump uses a connecting rod in the main pump block to turn the rotor. Keep all foreign objects, hands, loose clothing or any other item form the main pump block.

Foreign objects, loose clothing or any other item may get caught in the rod and pull the object into the main pump block.

Exercise extreme caution around the hopper.

Note the setting time of the material refer to manufacture instructions.

Safety Is First Priority!!!

GENERAL DESCRIPTION

Components

Cart with, pump, hopper, hose set, and cleaning kit.
Benron Texture Gun.(or pole gun)
Spray Tips, 1/8 in, 3/16 in., 1/4 in, and 5/16 in.
When pole select tip are, 3/16 in, 1/4 in, 5/16 in, 3/8 in, and 9/16 in use tip retainer.
50 ft , 1 in x 200psi Material Hose.
50 ft , 3/8 in x 200psi Air Hose.
51 ft Control Cord.

Specifications 19-230EU/19-245EU

Power Requirement.....230V, 60 Hz, and 240V, 50Hz
Spray Delivery with Texture Material..... 2GPM -7.7L/MI at 395/225 RPM
Hopper.....17GAL- 65L
Pump Rotor Stator.....2L3/1L4
Wash-Down Electric Motor……...2 HP - 1.55KW
Max. Pressure.....……...450PSI -31BAR (with 2L3 set-up)
Aggregate size.....1/6” to 1/8” - 3mm to 4mm (2L3 set-up)
Run Amps @ Maximum load……7
Weight.....170LB-77KG
Noise Lavel.....74/85 at max speed and 1meter from sprayer

Dimensions

Width outer wheels …….....24 in .- 61mm
Width outer hopper…….....22 in. - 56mm
Length from front of pump to beck wheel...……..45 in. - 114mm (2L3 pump set up)
Height from floor to hendlle……..38 in. - 97mm

Operational instructions

Note: If you are a new user we recommend that you will operate the unit with water and dishwasher detergent at first to get familiar with the sprayer operations.

1. Before starting the Rotortex make sure that the unit is properly assembled. You can do so by making sure there are no missing parts and that every thing is connected in its place. (Follow instructions as indicated in Owners Manual)

2. Inspect all electrical cords and connections; they must not be damaged in anyway. The grounding terminals must not be missing. If any connectors look faulty do not use the unit until it has been replaced. It is imperative that all connectors must be in perfect working condition.

3. Before connecting material hose to sprayer and gun, make sure the FWD/OFF/REV switch on the control box is at off and the switch on the gun or pole gun is at off position. (The switch on the gun/pole gun must be pushed down to be in off position)

4. Rinse material hose with a dishwasher soap and water to lubricate the hose. (This will help prevent any clogs in your line)

5. Connect hoses to unit and the attached electrical cord to control box cord, make sure that the unit does not start working; if it starts working shut it down immediately with e-stop!

6. Once your material has been prepared for spraying make sure that there are no foreign objects in the mix, pour material into hopper. (Materials must be prepared to manufactures specifications)

7. Next find the Male Air Q/D on Front Right Side of the unit connect your air compressor into it and the Air Hose that goes to the gun onto the other end. Remember to always Open the air valve at gun and allow air to bleed out of the spray tip before you start the flow of the material. This will prevent the material from clogging your needle and spray tip and beck flow in the air line.

8. Connect power cord to 230v or 240v only, and turn main switch to ON position.

9. Move FWD/OFF/REV switch on control box to FWD position. Sprayer should not turn on at this point. Find the speed dial, we recommend that you start at half turn, you may increase to maximum speed if needed by turning it to max. Now pull up the switch on the gun, at this point the sprayer should start. (Note the switch on your gun/pole gun must be lifted or pulled up to turn on)

10. If sprayer does not start, push the switch on the gun/pole gun down and at control box switch to OFF position.

11. The following instructions will indicate how to free the pump in case it is stuck or it has not been used long enough for it to dry and it is now seized. Go to beck of sprayer find Belt-Guard insert ¾" tool provided through the round hole at center and turn the shaft 5 to 8 turns clockwise only, this will allow material to flow in to pump and free from be stuck, when you feel that it is free go back to step 6.

12. You must always mix materials before pouring into hopper. If any of the materials are not mixed properly it may have dry clumps that can result in bad finishes.

13. Prime hose with the material by transferring it back to hopper, make sure material is not purging. Once material is flowing through evenly adjust the speed dial to your desired setting.

14. It is always recommended that you try to spray on sample board before applying to final surface. Apply material on to surface. (Note: when stopping for any reason you must push down switch on gun/pole gun to stop the sprayer from delivering material. Failure to do so can build up pressure that can result in blown out hose or severe bodily injury).

15. When finished, stop sprayer as instructed by step 14.

16. Mix dishwasher soap and water to clean out pump and hoses, if only water is available you must turn speed dial to maximum speed, and clean hopper, pump and hoses. It is recommended that you should be as thorough as possible when cleaning the sprayer. (Note: by doing so you will insure the sprayers longevity)

18. Before disconnecting the hoses you must turn FWD/OFF/REV switch on the control to REV pull switch on gun/pole gun. This will work your pump in reverse resulting in the material being pulled back through the pump and hose. (Note: do not go over 30 second on the reverse mode). Now you can proceed with disconnecting the hoses without they're being any back pressure.

19. We highly recommended that after each use to disconnect the main pump from the main block assembly, and wash with water the pump drive inside the main block.

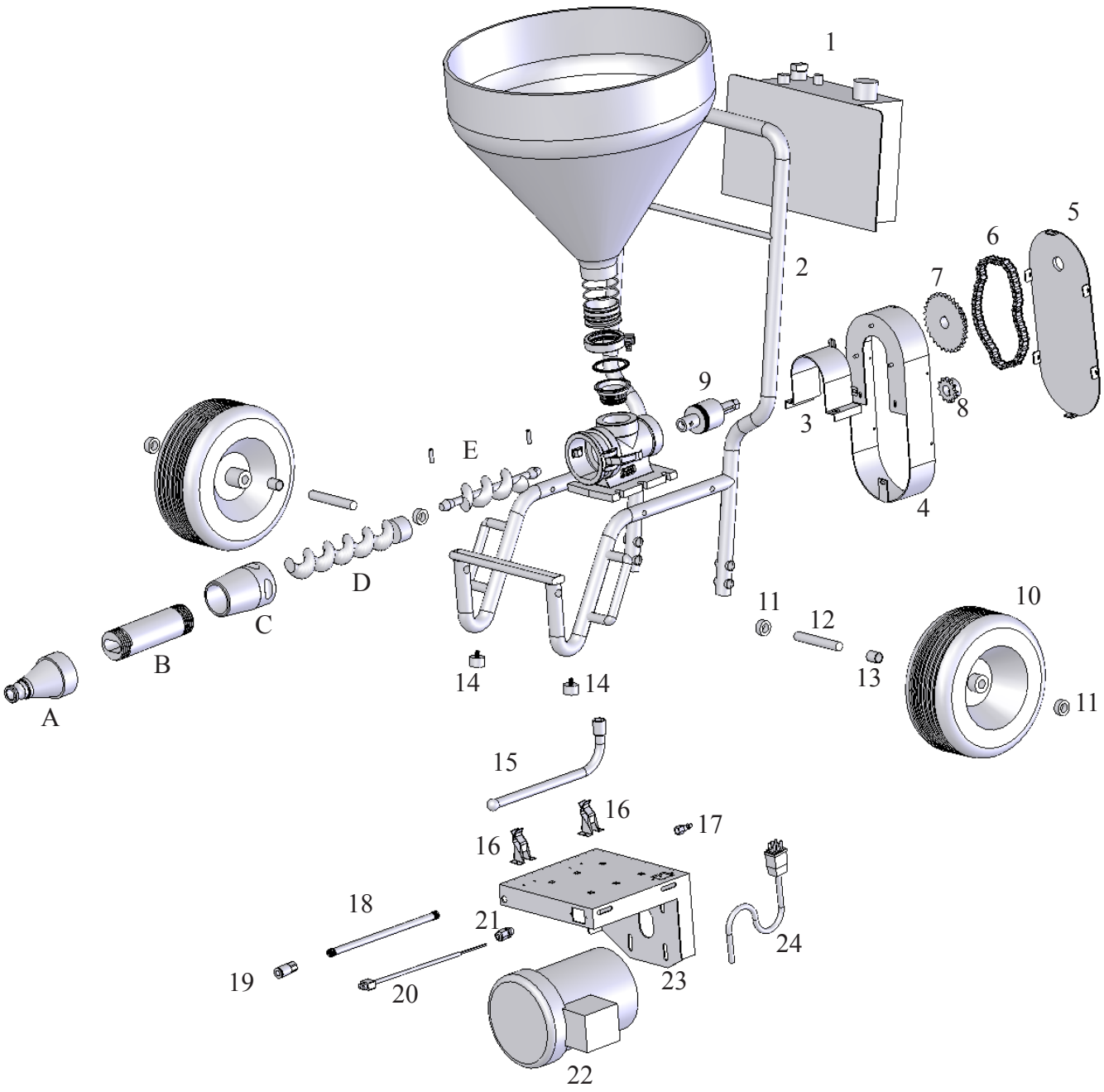
20. If available use Permatex Silicone Spray Lubricant on the Rotor and Stator before assemble beck to main block, make sure to place safety pin in holes after installations.

Note: Before starting the unit you must at first turn air on, trigger gun or open ball Valve, and then turn on the sprayer on.

For stopping the sprayer you must before, to shut off On/Off switch, and keep spraying until no material spray from the gun release trigger or close ball valve, and turn air off.

Fail to do that will result in clogged spray tip or hose from over pressure and material being pack-up.

Main frame assembly



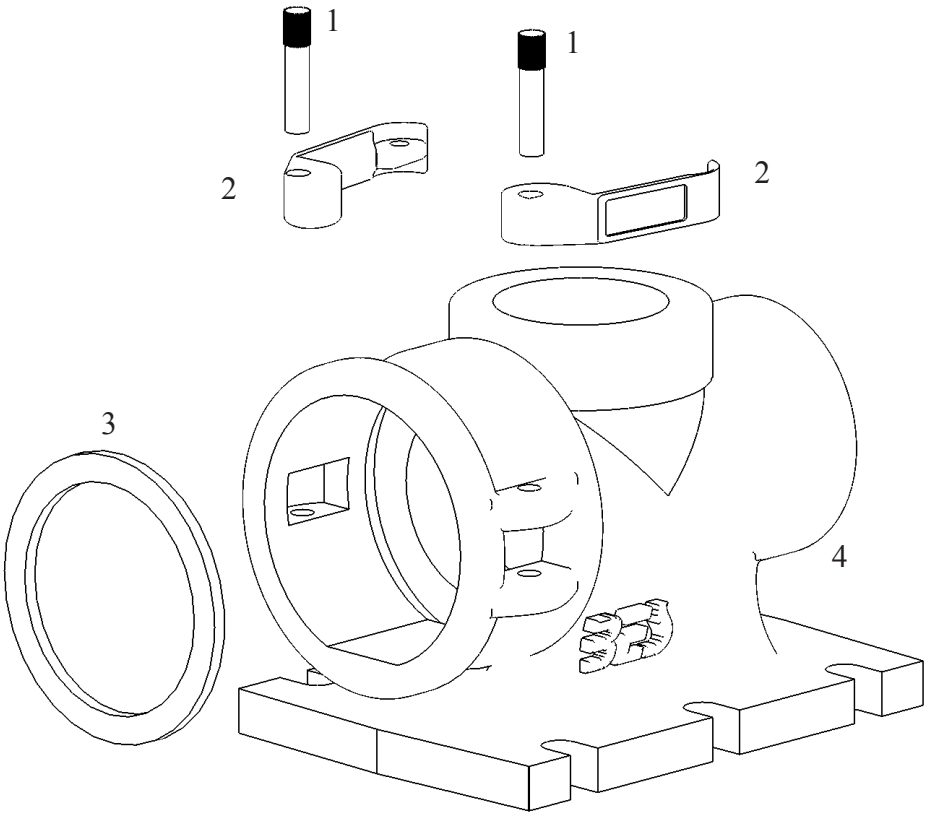
Note: Parts A, B, C, D, and E will change when the assembly build with 1L4 Rotor-Stator

Main frame parts list

Item Number	Part Number	Description	Qty
1	19-300	Control box assembly	1
2	19-028	Main frame	1
3	19-1558	Cartridge cover	1
4	19-1523	Guard for belt	1
5	19-1524	Guard cover	1
6	19-022EU	Belt	1
6A	19-084-225	Chain	1
7	19-025EU	Upper sprocket	1
7A	19-082	Upper gear	1
8	19-026EU	Lower sprocket	1
8A	19-081	Lower gear	1
9	19-027	Cartridge assy	1
10	15-282	Wheel	2
11	19-1578	Axle lock	4
12	19-308	Axle	2
13	19-309	Axle sleeve	2
14	19-060	Rubber foot	2
15	19-160	3/4 in Socket with handle	1
16	19-162	Spring grip	2
17	10-123	Air fitting	1
18	19-066	Air tube	1
19	16-012	Air quick connector	1
20	19-306	Control cable to main box	1
21	19-1541	Cable mounting plate	1
22	19-037EU	2HP electric motor	1
23	19-036	Main base support	1
24	19-307	Electric motor cable	1

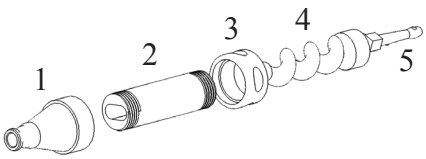
Note: Parts 6, 6A, 7, 7A, 8, and 8A will change if low speed and more torque required.

Main block assembly



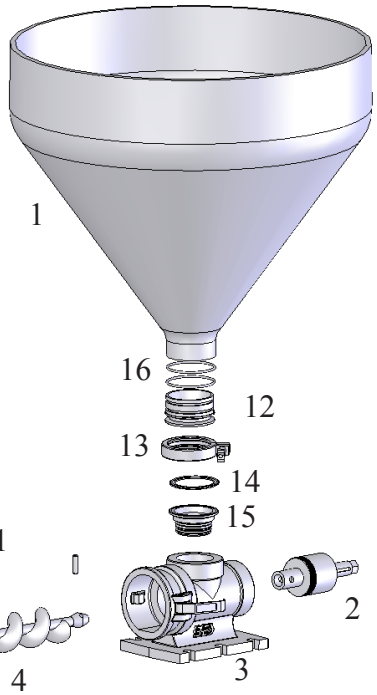
Item Number	Part Number	Description	Qty
1	N/A	Pin handle (sold with handle)	2
2	19-075	Side Handle	2
3	19-074	“O” Ring	1
4	19-010	Main Block	1

Hopper and pump assembly



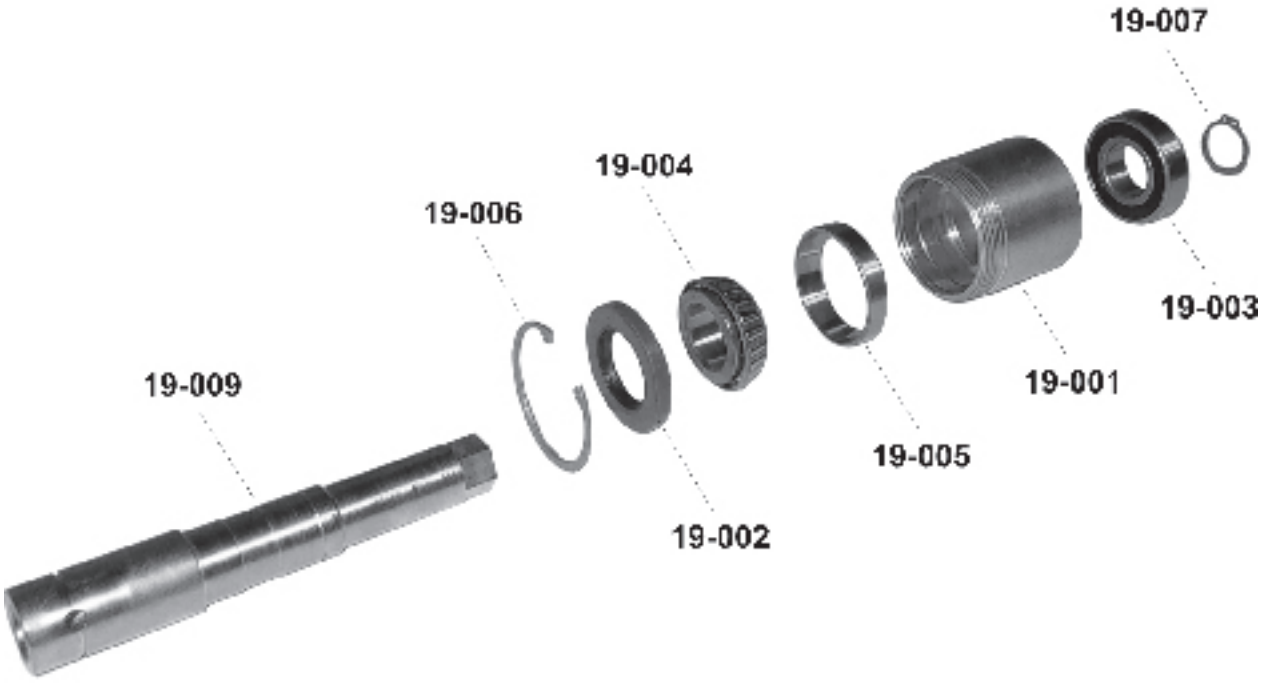
Pump assy for pump P/n 19-245EU

1	19-1549	Special hose fitting
2	19-1543	Stator
3	19-1556	Stator fluid fitting
4	19-1542	Rotor
5	19-1531	Connecting rod



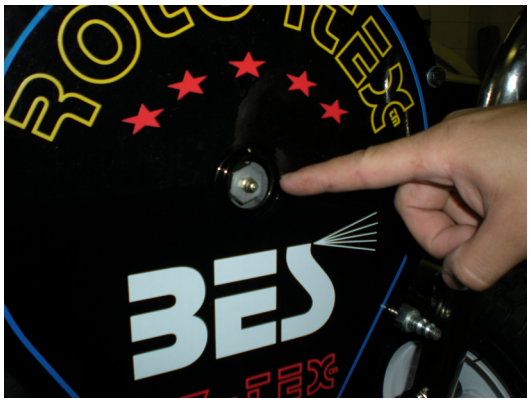
Item Number	Part Number	Description	Qty
1	19-030-17	Hopper	1
2	19-027	Cartridge Assy	1
3	19-010	Main Block Assy	1
4	19-301	Connecting Rod	1
5	19-302	2L3H Rotor	1
6	19-303	Redus Fitting	1
7	19-304	Nipple	1
8	19-1556	Stator Fluid Fitting	1
9	19-011/2L3	Stator	1
10	19-049	Special Hose Fitting	1
11	19-305	Screw and nut	2
12	19-018	Upper Fitting	1
13	19-016	2.5 in Clamp	2
14	19-048	Gasket Buna	1
15	19-019	Lower Fitting	1
16	19-017	“O” Ring	1

19-027 Cartridge assembly

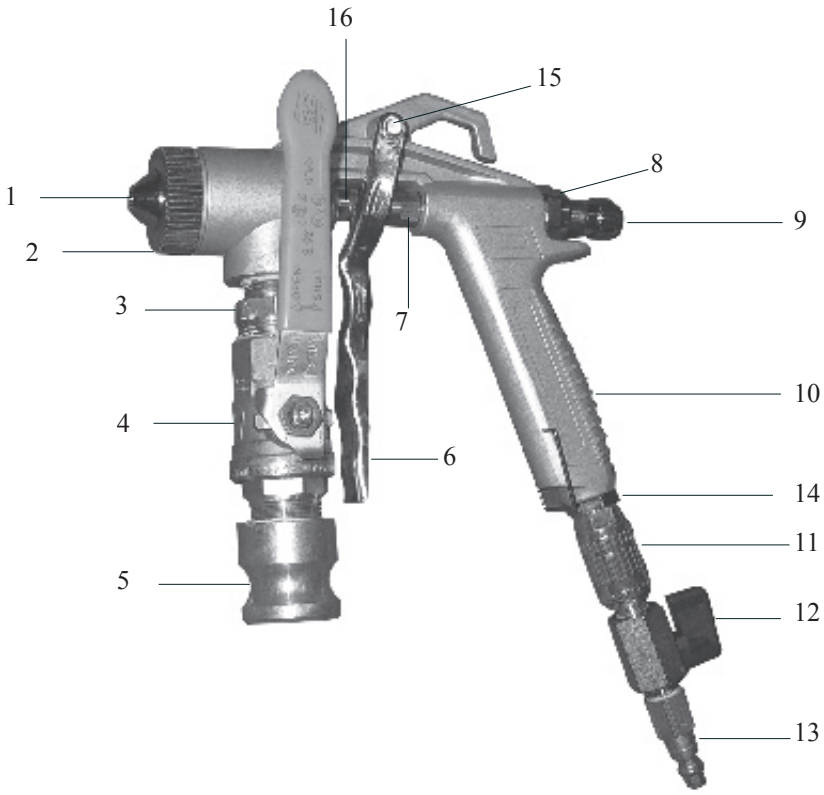


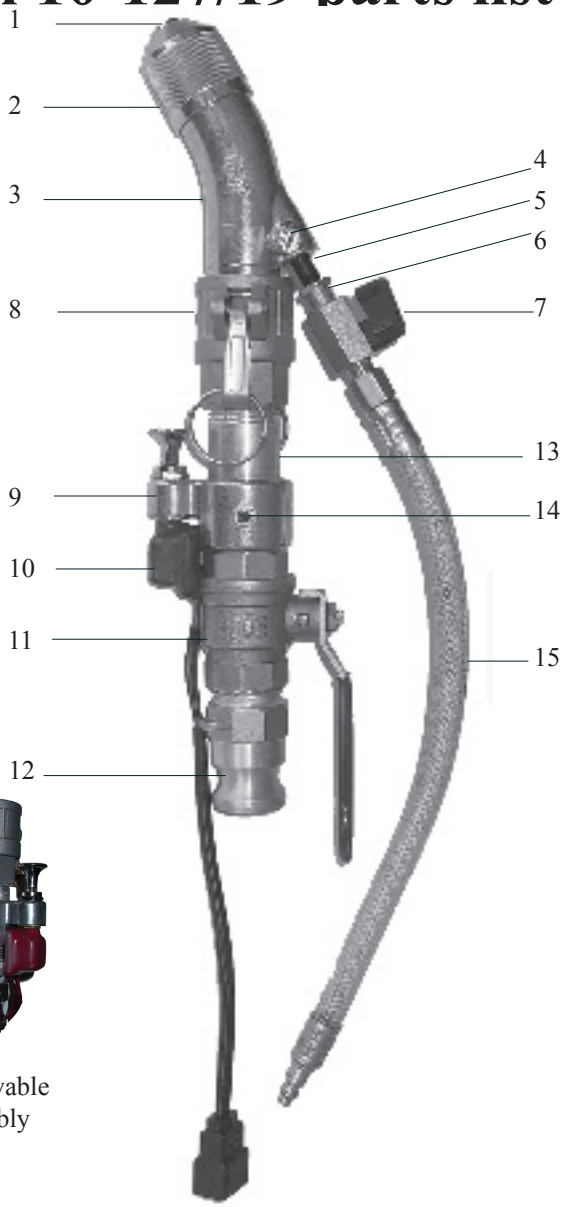
Note:

A. When assemble insert part 19-006 in front of 19-004 and then press seal 19-002 with lip out.
B. Use heavy duty marine grease when repack bearing.
C. At the beck of shaft 19-009 is greas fitting, you must re-greas daily if use machine.



Trigger gun 16-311D and pole gun 10-127/19 parts list





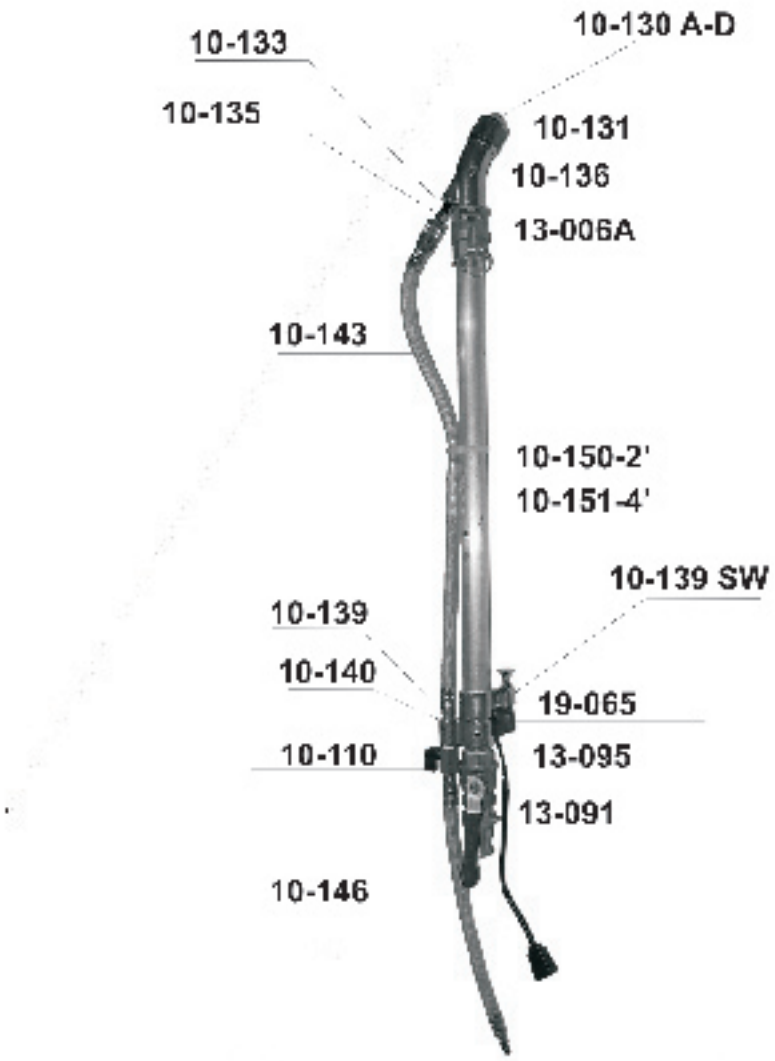
Note:
When using the gun to spray cement base products, you must remove the needle after each job.
Clean and lube "O-ring on the needle item 7, and needle adjustment item 9, with marine grease.
Needle removal direction:
Remove item 1, and 9, push needle from the tip side through the back of the gun body.

19-163 removable switch assembly

Iten	Part #	Description	Quantity
1	16-103	1/8" Round tip	1
1	16-104	3/16" Round tip	1
1	16-105	1/4" Round tip	1
1	16-106	5/16" Round tip	1
2	16-107	Tip retainer	1
3	16-313	Valve fitting	1
4	10-312	3/4" Ball valve	1
5	10-304	1" x 3/4" Fluid fitting	1
6	10-108	Trigger	1
7	16-301	Air needle	1
8	10-300	Fluid control nut guide	1
9	10-302	Fluid control	1
10	16-108	Gun body	1
11	10-111	Air vale regulator	1
12	10-110	Air valve	1
13	10-123	Air plug quick connect	1
14	16-303	Air adapter	1
15	16-114	Trigger pin	1
16	10-228	Needle fitting	1
17	10-116	O-ring not shown	4

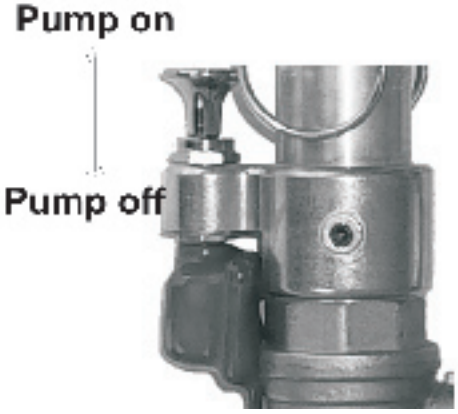
Iten	Part #	Description	Quantity
1	10-130A	3/16" Round tip	1
1	10-130B	1/4" Round tip	1
1	10-130C	5/16" Round tip	1
1	10-130D	3/8" Round tip	1
2	10-131	Tip retainer	1
3	10-136	Gun body	1
4	10-005	Thumb screw	1
5	10-133	Stem	1
6	10-134	Bushing	1
7	10-110	Air valve	1
8	13-006A	Quick connector	1
9	10-139SW	Switch body	1
10	19-065	Switch	1
11	13-095	1" Ball vale	1
12	13-091	Quick connector	1
13	10-153	Tube	1
14	10-140	Set screw	1
15	10-146	Air hose	1

Pole gun 10-128/19 and 10-129/19 parts list

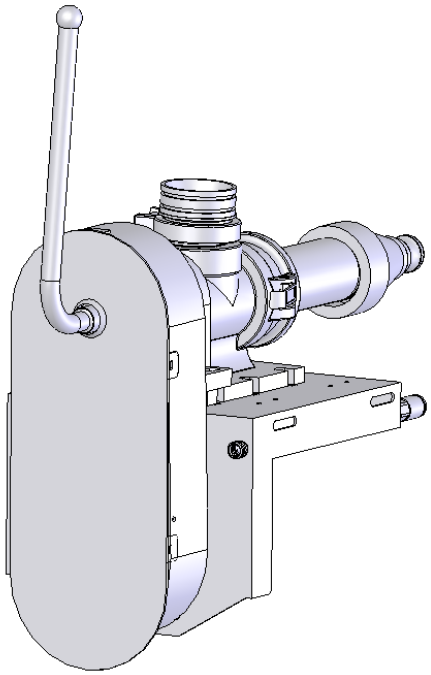


Caution: Please note that the **R2** sprayer is capable to reach high fluid pressure. Make sure to check all fluid fitting for proper working conditions. if found a defective part you must replace it before use, defective parts can result in serious injury. Use only original manufacture parts do not modified any other way.

Caution: Always make sure that On/Off Pump switch is at off position before connecting to control cable.



19-160 Easy start up tools



Note: Before starting up the sprayer you must insert tool 19-160 and turn clockwise until pump turning free and easy. If necessary add water and soap to hopper. Do not operate sprayer when handle is attached to shaft, must remove handle and turn sprayer On.

Warning: If purchase sprayer 19-245EU do not turn handle counterclockwise, it will disconnect the rotor from the connecting rod.

If disconnect remove P/N 19-1549 turn and push beck into connecting rod.

Spraying techniques

Spraying Orangepeel	Use 1/8” or 3/16”Spray Tips	Medium To High Air Flow.
Spraying Knockdown	Use 1/4”-5/16”-3/8” Spray Tips.	Low To Medium Air Flow.
Spraying Acoustic Ceiling	Use 5/16”-3/8” Spray tips.	Medium To High Air Flow.
Spraying Monocote Mk-6	Use 5/16”-3/8” Spray Tips.	Medium To High Air Flow.
Spraying E.I.F.S		
Fine	Use 1/8”-3/16” Spray Tips.	Medium To High Air Flow.
Medium	Use 3/16”-1/4” Spray Tips.	Medium To High Air Flow.
Coarse	Use 5/16”-3/8” Spray Tips.	Medium To High Air Flow.
Spraying Texture Coating.	See Spraying E.I.F.S. Techniques.	See Spraying E.I.F.S. Techniques.
Fine		
Medium		
Coarse		

Note: Here is a helpful tip to remember. When trying to achieve a fine or lighter texture you want to use more air & less material. If you want a heavy texture, apply more material and less air.
(The 3/8” tip is supplied only with the purchase of a pole gun.)

Attention:
Before turning unit
1. Open air
2. Trigger gun
3. Turn unit to On.

When stopping
1. Turn unit Off keep triggering until pressure drop
2. Release trigger
3. Close air

Electric component

1 E-switch

2 Speed control

3 Green on light

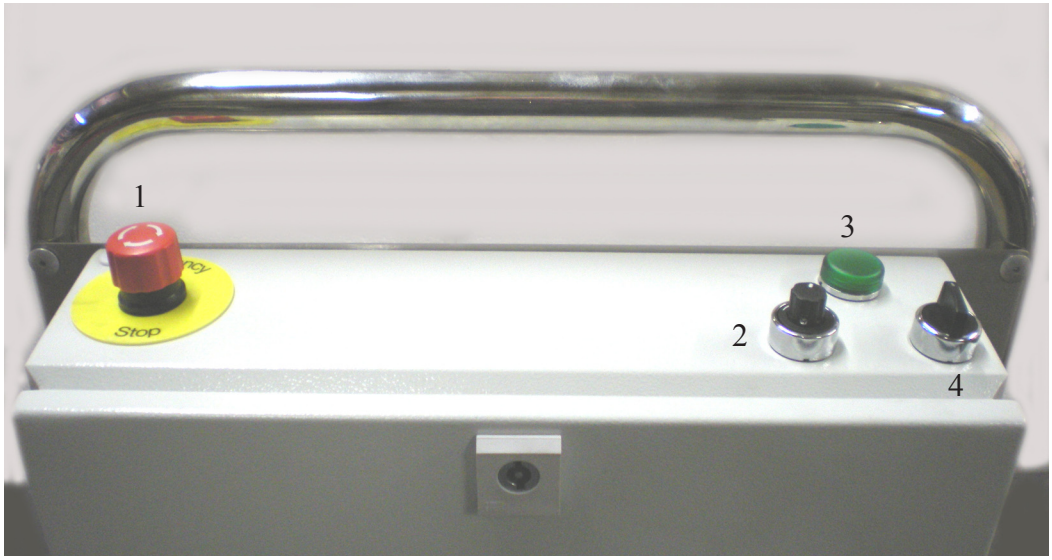
4 Forward and revers control

5 Electric drive converter

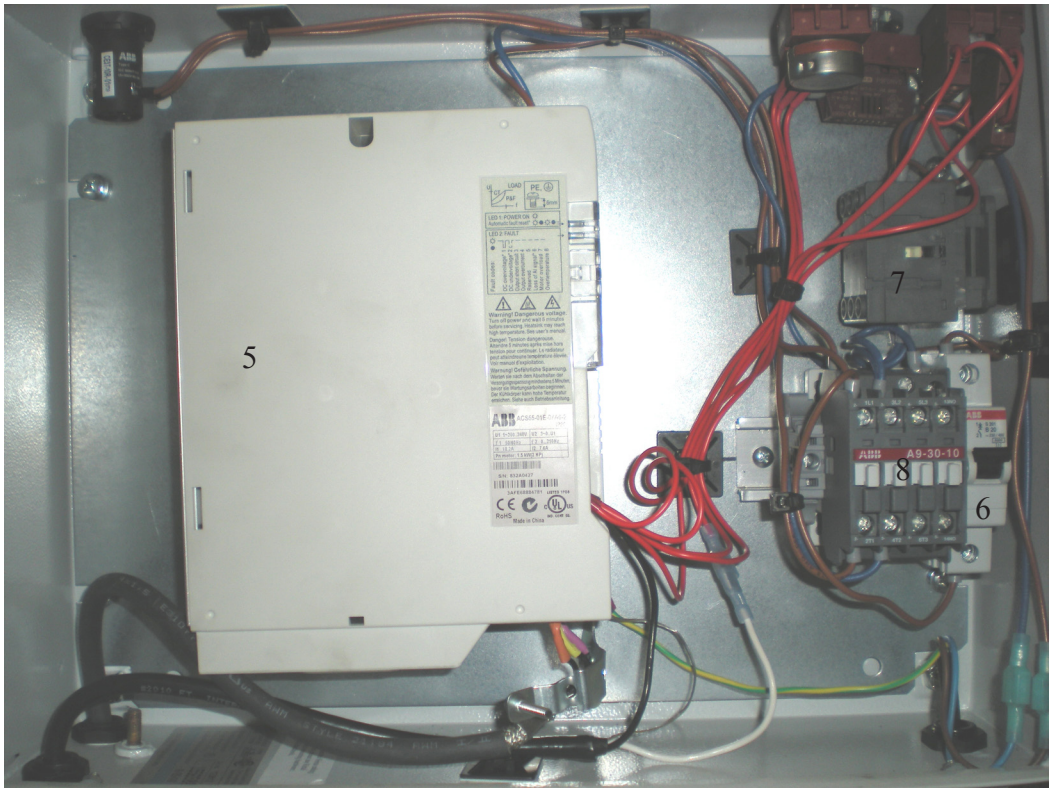
6 20 amps auto breaker

7 Main switch body

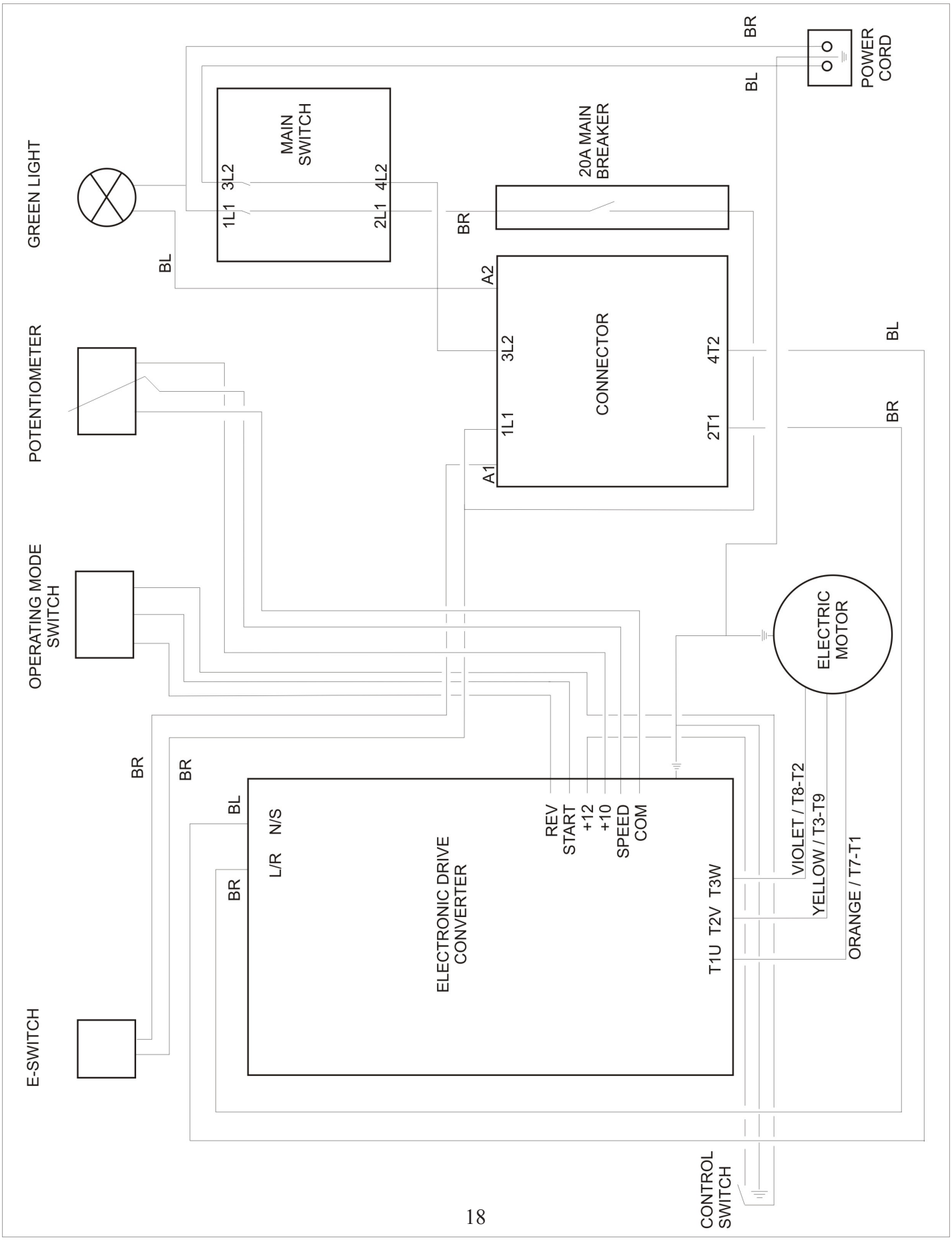
8 Main E-switch body



Note: Item # 4 will work only forward when purchase sprayer P/n 19-245EU



Electric diagram



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5 Sep 2008
RV98024A-001

Declaration of Conformity

Application of Council Directive: 2004/108/EC

Standards To Which Conformity Is Declared:	**EN61326: 2006** **EN55011 Class A Group 1** **EN61000-3-2** **EN61000-3-3** **EN61000-4-2** **EN61000-4-3** **EN61000-4-4** **EN61000-4-5** **EN61000-4-6** **EN61000-4-8** **EN61000-4-11**
Manufacturer's Name:	**Benron Equipment & Supply, Inc.**
Manufacturer's Address:	**15823 Stagg Street** **Van Nuys, CA 91406**
Equipment Description:	**Texture Sprayer**
Equipment Class:	**Electrical Equipment Measurement, Control & Laboratory Use - Industrial**
Model Numbers:	**ROTORTEX**

I the undersigned, hereby declare that the equipment specified above, conforms to the above Directive(s) and Standard(s).

Van Nuys, California, U.S.A.
Place:

Signature:

Eran Zagorsky
Full Name:

President
Position:

Rotortex warranty

All products manufactured by Benron Equipment & Supply, Inc. are warranted to the original purchaser against defects in material and workmanship at the time of sale by an authorized Benron Equipment & Supply distributor and for a period of 12 months from date of purchase. This warranty applies only if the product is operated and maintained in accordance with Benron's written instructions.

Benron will repair or replace any part of the equipment proven defective. Repair or replacement under this warranty shall be the purchaser's sole remedy for breach of this warranty. Benron Equipment and Supply will not be responsible for any downtime resulting from breakdown or for cost of rental equipment while repairs are being made.

This warranty does not cover damage to the product resulting from improper use, accident, user's negligence, or if the product has not been operated or installed in accordance with Benron's recommendations. This warranty does not cover damages caused by service or repair performed by other than a Benron authorized repair center. Benron is not liable for incidental or consequential damages or to damages to other properties caused by use of the product in a faulty condition or manner.

Any implied warranty of merchantability or fitness for a particular purpose is limited to 90 days for professional rental use, and for One year (12 months) for professional contractor use, from date of purchase. Some states do not allow limitations on how long implied warranty lasts so above limitations may not apply to you.

If product is defective in material or workmanship during the warranty period, return it with proof of purchase to Benron Equipment & Supply, Inc. or to Benron authorized warranty service center, for verification of claimed defect. If the alleged defect is verified, Benron will repair or replace (at Benron's option) any defective parts, and will return the product, transportation prepaid. If no defects in material or workmanship are found, Benron will repair the product at a reasonable charge. Charges may include the cost of parts, labor, and freight.

One year limited warranty, excluding consumable components.

The items, which are not covered, are:

Spry tips, Gun needle, **Rotor and Stator**, ball valves, Material hose, Air hose and control cords.

If gas or electric air compressor was purchased with sprayer it also has 1 year warranty.

This warranty does not cover damage or defects caused by or related to Abrasion, Corrosion, Abuse, Misuse, Negligence, Accident, Normal wear, Faulty Installation or tampering in manner which impairs normal operation.

This warranty does not cover any burn of electrical components if proper electric cords or outlet has not been used.

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